

NEW RECORDS OF CERATOPOGONIDAE (DIPTERA) FROM NORTH CAROLINA¹

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ABSTRACT: Eighteen species of ceratopogonids (Diptera: Ceratopogonidae) are reported from North Carolina for the first time. They include: *Atrichopogon levis*, *A. fuscus*, *Forcipomyia brevipennis*, *F. fimbriata*, *F. squamipes*, *F. pluvialis*, *Dasyhelea major*, *D. navaiae*, *Culicoides chiopterus*, *Parabezzia alexanderi*, *Jenkinshelea albaria*, *Johannsenomyia argentata*, *Probezzia pallida*, *Bezzia glabra*, *B. laciniastyla*, *B. pulvereae*, *B. setulosa*, and *Phaenobezzia opaca*.

Records of North Carolina ceratopogonids are scattered in the literature. Brimley (1938), in the first attempt at cataloging the insect fauna of North Carolina listed 7 species in 6 genera of ceratopogonids. Wray (1967) published a supplement to the Brimley catalogue which added 6 more species and 3 genera. Battle and Turner (1970, 1971) summarized the North Carolina *Culicoides* listing a total of 15 species. Kline and Axtell (1976) collected an additional 4 species of *Culicoides* in a *Spartina* salt marsh in coastal North Carolina. To my knowledge, no other major listing of North Carolina ceratopogonids has been published.

Listed below are 18 species previously unreported from North Carolina. The specimens were collected during 1978 and 1979 at Lake Norman, a large, warm, monomictic, piedmont reservoir in Mecklenburg County, North Carolina. Adults were collected either by ultraviolet and standard fluorescent light traps (LT), emergence traps (ET), or by rearing (R) from pupae collected at the water surface (S). For each species listed, the dates collected, the sex, the number of specimens obtained, and the collection method are given. Voucher specimens are deposited in the Duke Power Company Environmental Services invertebrate collection.

Forcipomyiinae

- Atrichopogon* (*Atrichopogon*) *levis* (Coquillett 1901): 30-VI-78, 1 male, LT.
A. (A.) fuscus (Coquillett, 1901): 19-V-78, 1 male; 30-VI-78, 1 male; 19-X-78, 1 male, LT.
Forcipomyia (*Forcipomyia*) *brevipennis* (Macquart, 1826): 23-VI-78, 1 male, LT.
F. (F.) fimbriata (Coquillett, 1901): 19-X-78, 1 male, LT.
F. (F.) squampies (Coquillett, 1902): 19-X-78, 1 male, LT.
F. (Metaforcipomyia) pluvialis Malloch, 1923: 24-VIII-78; 1 male, LT.

Dasyheleinae

- Dasyhelea major* (Malloch, 1915): 14-IV-78, 10 males, 14 females; 12-V-78, 2 males; 1-VI-

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78, 2 males; 4-VI-78, 1 male; 30-VI-78, 1 male; 15-V-79, 2 males, LT, R.
D. navaiae Waugh and Wirth, 1976: 30-VI-78, 1 male, LT.

Ceratopogoninae Culicoidini

Culicoides (Avaritia) chiopterus (Meigen, 1830): 28-IX-78, 1 male; 19-X-78, 1 male, LT.

Stilobezziini

Parabezzia alexanderi Wirth, 1965: 15-V-79, 2 male pupae, S.

Sphaeromiini

Jenkinshelea albaria (Coquillett, 1895): 17-VIII-78, 1 male, R.

Johannsenomyia argentata (Loew, 1861): 1-VI-78, 1 female; 14-VII-78, 1 male; 28-VII-78, 3 females, LT.

Probezzia pallida Malloch, 1914: 26-V-78, 1 male; 1-VI-78, 9 males, 10 females; 9-VI-78, 1 male; 7-VII-78, 1 male; 15-V-79, 12 males, R.

Palpomyiini

Bezzia (Aspinabezzia) glabra (Coquillett, 1902): 12-V-78, 1 male, 1 female; 26-V-78, 2 males; 4-VI-78, 1 male; 8-VI-78, 1 female, 9-VI-78, 2 males, 1 female; 16-VI-78, 2 males; 30-VI-78, 4 males, 1 female, LT, ET, R.

B. (Pseudobezzia) laciniastyla Dow and Turner, 1976: 30-VI-78, 1 female, LT.

B. (P.) pulverea (Coquillett, 1901): 14-IX-78, 1 male, ET.

B. (P.) setulosa (Loew, 1861): 19-V-78, 2 males; 4-VI-78, 1 male; 30-VI-78, 2 males; 31-VIII-78, 1 male, LT.

Phaenobezzia opaca (Loew, 1861): 14-IV-78, 1 male, 17-V-78, 1 female; 1-VI-78, 1 female, 7-VI-78, 1 male; 15-V-79, 1 female, ET, R.

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